

SMA Male to SMA Male Cable Assembly using LC085TBJ Coax, 6 FT



LCCA30131-FT6

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: LC085TBJ

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.5% VoP
- Hand Formable
- Tin Filled Copper Composite Braid Outer Conductor
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- System Interconnect



Description

L-com's LCCA30131-FT6 is a SMA male to SMA male cable assembly using LC085TBJ coax, 6 FT and ships same-day. The LC085TBJ coax of this SMA cable uses the PTFE dielectric with a VoP of 69.5%. These formable RF cable assemblies are a great alternative to expensive semi-rigid assemblies because they can be hand formed to fit specific designs. Our L-com SMA to SMA cable assembly has a male to male gender configuration with formable LC085TBJ series coax and operates to 18 GHz. The jacketed tinned copper composite braid outer conductor is easily formed by hand with an overall diameter of 0.105 inches and excellent shielding effectiveness greater than 100dB.

Custom versions of this SMA male to SMA male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA30131-FT6 L-com SMA Male to SMA Male Cable Assembly using LC085TBJ Coax, 6 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Velocity of Propagation		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			1,500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	1.55	2.04	3.26	4.76	6.94	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length	72 in [182.88 cm]
Diameter	0.105 in [2.67 mm]

Cable

Cable Type	LC085TBJ
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	0
Outer Conductor Material and Plating	Tinned Copper Composite Braid
Outer Conductor Diameter	0.085 in [2.16 mm]
Jacket Material	FEP
Jacket Diameter	0.105 in [2.67 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]

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Repeated Minimum Bend Radius

0.787 in [19.99 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel	Brass, Gold over Nickel
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold over Nickel	Brass, Gold over Nickel
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Hex Size	5/16 inch	5/16 inch
Torque	10 in-lbs 1.13 Nm	10 in-lbs 1.13 Nm

Environmental Specifications

Temperature

Operating Range

-55 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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LCCA30131-FT6

How to Order

Part Number Configuration:

LCCA30131

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: LCCA30131-12 = 12 inches long cable
LCCA30131-100cm = 100 cm long cable

SMA Male to SMA Male Cable Assembly using LC085TBJ Coax, 6 FT from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

SMA Male to SMA Male Cable Assembly using LC085TBJ Coax, 6 FT

L-com CAD Drawing

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	01/31/2020	SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

THIRD-ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: .X = ±.2 [.08] FRACTIONS .XX = ±.02 [.51] ± 1/32 .XXX = ±.005 [.13] ANGLES ± 1°	CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = ±1 [25] / -0 12 [305] < L ≤ 60 [1524] = ±2 [51] / -0 60 [1524] < L ≤ 120 [3048] = ±4 [102] / -0 120 [3048] < L ≤ 300 [7620] = ±6 [152] / -0 300 [7620] < L = ±5% L / -0
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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

NOTES:

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END, 6.0" FROM THE FRONT OF THE CONNECTOR.

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SIZE A	CAGE CODE DRAWN BY 43321 MVEERAPPAN	PART NUMBER LCCA30131	REV A